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10/824,161

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Scott A. Konersmann

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EXAMINER

JUNG, DAVID YIUK

ART UNIT

PAPER NUMBER

2134

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/824,161

Applicant(s)

KONERSMANN ET AL.

Examiner

David Y. Jung

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____                                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2004; 2005</u>  | 6) <input type="checkbox"/> Other: ____                           |

## DETAILED ACTION

### CLAIMS PRESENTED

Claims 1-35 are presented.

### Discussion of general art

<http://www.ietf.org/rfc/rfc3325.txt>

Certificate key and Trusted domain are discussed. These are relevant to any consideration, conception, and comparison of autonomous nature situation of computing, such as fiefdom proposed by Mr. Helland. See, for instance, discussion at the rejection of claim 5. Mr. Helland (the person in the Helland reference) is of the same name as one of the inventor names (and of same company) of this patent application.

### CLAIM REJECTIONS

#### *Claim Rejections - 35 USC § 101*

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Regarding claims 1-35, the claimed invention is directed to non-statutory subject matter. Claims recite only perfunctory recitation of functional material (computer readable medium, etc.). Aside from this, the claims recite only nonfunctional descriptive material. When nonfunctional descriptive material is recorded on some computer-

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readable medium, in a computer or on an electromagnetic carrier signal, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance.

For further guidance on the term "nonfunctional", please see MPEP 2106.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helland (<http://www.microsoft.com/presspass/exec/flessner/04-11flessnerteched.msp>) and Bresson (cited by Applicant, EMMANUEL BRESSON, et al., Provably Authenticated Group Diffie-Hellman Key Exchange, CCS'01, 2001, pp. 255-264,

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Philadelphia, Pennsylvania, USA) and IETF (<http://tools.ietf.org/html/draft-ietf-sip-rfc2543bis-09>).

Regarding claim 1, Bresson teaches "A secure message generation system comprising: a service pair encryption component that employs an initiator private key to encrypt authentication information; a key exchange key encryption component that employs a target public key to encrypt a key exchange key; [ ] encryption component that employs the key exchange key to encrypt [ ]; a message body encryption component that employs [ ] to encrypt a message body; and, a message generator that provides an encrypted message based, at least in part, upon the encrypted authentication information, the encrypted key exchange key, the encrypted [ ] and the encrypted message body (Bresson, pages 255-256).

These passages of Bresson do not teach "dialog session" or "session key." IETF teaches "dialog session (Section 26.1.4 Tearing Down Session, the first paragraph, the discussion on dialog and/or session)" and "session key (Section 26.1.3 Tampering with Message Bodies, the third paragraph, the discussion on session key and on end-to-end security)" for the motivation of security.

These passages of Bresson and IETF are not explicit about the particular way that the claimed invention, as a whole, would produce such autonomous nature of data handling. This is difficult to quote from any single phrase or any single word of the claim; the autonomous nature is difficult to quote, but prominently exists.

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Helland teaches such autonomous nature. Mr. Helland (the person in this Helland reference) is of the same name as one of the inventor names (and of same company) of this patent application. Helland (the reference) contains a section in which Mr. Helland and Mr. Flessner discuss fiefdom and autonomous nature (which are usually expressed in certificates and/or dialog sessions being unique).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Bresson, letf, and Helland for the motivation noted in the previous paragraphs so as to teach the claimed invention.

2. The system of claim 1, the message generator generates a security preamble of the encrypted message.

-- Messages usually have frames and preambles. As preamble is the first part, preambles are natural for security information. In other words, this feature is well known in the art for efficiency and security.

3. The system of claim 2, the security preamble comprising at least one of a version information field, a message integrity check information field, a time associated with creation of the message field and an encryption salt value used for the message field.

-- Such time and salt value handlings are well known for motivation of actuation of security.

Claims 4, 6-13:

Such key handling features are well known in the art for security.

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5. The system of claim 4, the service pair security header comprising at least one of an initiator certificate name field, an initiator certificate issue date field, a target certificate name field, a target certificate name field and a signature field.

Certificates are well known in the art. As for how certificates would be used, see the considerations noted in the cited sections of Helland (showing autonomous nature, thus such field would be expressed in certificates and/or unique dialog sessions).

Claims 14-16:

Such message handlings are well known for the purpose of efficiency and security.

17.

Bresson teaches A secure message receiver system comprising: a message receiver that receives an encrypted message; a service pair encryption component that employs an initiator public key to decrypt authentication information of the encrypted message; a key exchange key decryption component that employs a target private key to decrypt a key exchange key of the encrypted message, if the key exchange key is not stored in a cache; a [ ] decryption component that employs the key exchange key to decrypt a [ ] of the encrypted message, if the [ ] is not stored in the cache; and, a message body decryption component that employs the [ ] to decrypt a message body of the encrypted message.

(Bresson , pages 255-256).

These passages of Bresson do not teach "dialog session" or "session key."

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IETF teaches "dialog session (Section 26.1.4 Tearing Down Session, the first paragraph, the discussion on dialog and/or session)" and "session key (Section 26.1.3 Tampering with Message Bodies, the third paragraph, the discussion on session key and on end-to-end security)" for the motivation of security.

These passages of Bresson and IETF are not explicit about the particular way that the claimed invention, as a whole, would produce such autonomous nature of data handling. This is difficult to quote from any single phrase or any single word of the claim; the autonomous nature is difficult to quote, but prominently exists.

Helland teaches such autonomous nature. Mr. Helland (the person in this Helland reference) is of the same name as one of the inventor names (and of same company) of this patent application. Helland (the reference) contains a section in which Mr. Helland and Mr. Flessner discuss field and autonomous nature (which are usually expressed in certificates and/or dialog sessions being unique).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Bresson, IETF, and Helland for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 18-19:

Such message handlings are well known for the purpose of efficiency and security.

20. The system of claim 19, the service pair security header comprising at least one of an initiator certificate name field, an initiator certificate issue date field, a target certificate name field, a target certificate name field and a signature field.



Certificates are well known in the art. As for how certificates would be used, see the considerations noted in the cited sections of Helland (showing autonomous nature, thus such freedom would be expressed in certificates and/or unique dialog sessions).

Claims 21-25:

Such key handling features are well known in the art for security.

26.

Bresson teaches A method facilitating secure message generation comprising: providing encrypted authentication information, the encryption being based, at least in part, upon an initiator private key; providing an encrypted key exchange key, the encryption being based, at least in part, upon a target public key; providing an encrypted [ ], the encryption being based, at least in part, upon the key exchange key; and, providing an encrypted message body, encryption being based, at least in part, upon the [ ]. (Bresson , pages 255-256).

These passages of Bresson do not teach "dialog session" or "session key." left teaches "dialog session (Section 26.1.4 Tearing Down Session, the first paragraph, the discussion on dialog and/or session)" and "session key (Section 26.1.3 Tampering with Message Bodies, the third paragraph, the discussion on session key and on end-to-end security)" for the motivation of security.

These passages of Bresson and left are not explicit about the particular way that the claimed invention, as a whole, would produce such autonomous nature of data handling. This is difficult to quote from any single phrase or any single word of the claim; the autonomous nature is difficult to quote, but prominently exists.

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Helland teaches such autonomous nature. Mr. Helland (the person in this Helland reference) is of the same name as one of the inventor names (and of same company) of this patent application. Helland (the reference) contains a section in which Mr. Helland and Mr. Flessner discuss fiefdom and autonomous nature (which are usually expressed in certificates and/or dialog sessions being unique).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Bresson, Ieff, and Helland for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 27-28:

Such message handlings are well known for the purpose of efficiency and security.

Claims 29:

Such key handling features are well known in the art for security.

30. A computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 26.

Computer readable medium is well known for storage.

31.

Bresson teaches A method of receiving a secure message comprising: receiving an encrypted message; and, decrypting the encrypted message with a [ ], if a service pair security header, a key exchange key header and a [ ] header associated with the encrypted message have been stored. (Bresson , pages 255-256).

These passages of Bresson do not teach "dialog session" or "session key."

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Ieff teaches "dialog session (Section 26.1.4 Tearing Down Session, the first paragraph, the discussion on dialog and/or session)" and "session key (Section 26.1.3 Tampering with Message Bodies, the third paragraph, the discussion on session key and on end-to-end security)" for the motivation of security.

These passages of Bresson and Ieff are not explicit about the particular way that the claimed invention, as a whole, would produce such autonomous nature of data handling. This is difficult to quote from any single phrase or any single word of the claim; the autonomous nature is difficult to quote, but prominently exists.

Helland teaches such autonomous nature. Mr. Helland (the person in this Helland reference) is of the same name as one of the inventor names (and of same company) of this patent application. Helland (the reference) contains a section in which Mr. Helland and Mr. Flessner discuss fieldwork and autonomous nature (which are usually expressed in certificates and/or dialog sessions being unique).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Bresson, Ieff, and Helland for the motivation noted in the previous paragraphs so as to teach the claimed invention.

Claims 32:

Such message handlings are well known for the purpose of efficiency and security.

Claims 33:

Such key handling features are well known in the art for security.

Computer readable medium is well known for storage.

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34. A computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 31.

Computer readable medium is well known for storage.

35.

Bresson teaches A data packet transmitted between two or more computer components that facilitates secure communication, the data packet comprising:

a key exchange key header comprising an encrypted key exchange key; a [ ] header comprising a [ ] encrypted with the key exchange key; and, a message body field comprising a message encrypted with the dialog session key. (Bresson , pages 255-256).

These passages of Bresson do not teach "dialog session" or "session key."

left teaches "dialog session (Section 26.1.4 Tearing Down Session, the first paragraph, the discussion on dialog and/or session)" and "session key (Section 26.1.3 Tampering with Message Bodies, the third paragraph, the discussion on session key and on end-to-end security)" for the motivation of security.

These passages of Bresson and left are not explicit about the particular way that the claimed invention, as a whole, would produce such autonomous nature of data handling. This is difficult to quote from any single phrase or any single word of the claim; the autonomous nature is difficult to quote, but prominently exists.

Helland teaches such autonomous nature. Mr. Helland (the person in this Helland reference) is of the same name as one of the inventor names (and of same company) of this patent application. Helland (the reference) contains a section in which

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Mr. Helland and Mr. Flessner discuss field of use and autonomous nature (which are usually expressed in certificates and/or dialog sessions being unique).

Hence, it would have been obvious to those of ordinary skill in the art at the time of the claimed invention to combine the teachings of Bresson, Ietf, and Helland for the motivation noted in the previous paragraphs so as to teach the claimed invention.

### ***Conclusion***

The art made of record and not relied upon is considered pertinent to applicant's disclosure. The art disclosed general background.

### ***Points of Contact***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(571) 273-8300, (for formal communications intended for entry)

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Or:

(571) 273-3836 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Jung whose telephone number is (571) 272-3836 or Kambiz Zand whose telephone number is (272) 272-3811.

David Jung

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Patent Examiner

A handwritten signature in black ink, consisting of a large, stylized 'D' followed by a series of loops and a long horizontal stroke extending to the right.

8/18/07